

WHAT IS CLAIMED IS:

1. A manufacturing method for a substrate for a liquid crystal device by oblique evaporation of an inorganic material on an underlayer having a gap section on the surface formed on the substrate so as to form the inorganic alignment layers, comprising the steps of:

a first oblique evaporation step by unidirectional oblique evaporation of the inorganic material on the substrate on which the underlayer having the gap section is formed on the surface of the substrate so as to form the first inorganic oblique evaporation layer 36a;

a second oblique evaporation step by oblique evaporation of the inorganic material from at least a different azimuth angle inside the substrate from the oblique evaporation direction of the inorganic material in the first oblique evaporation step so as to form the second oblique evaporation layer 36b in an area close to the gap section and on the first inorganic oblique evaporation layer.

2. A manufacturing method for a substrate for a liquid crystal device, according to claim 1, wherein the azimuth angle of the oblique evaporation direction (S_A) of the inorganic material in the first oblique evaporation step and the azimuth angle of the oblique evaporation direction (S_B) of the inorganic material in the second oblique evaporation step differ by nearly 90 degrees.

3. A manufacturing method of a substrate for a liquid crystal device according to claim 1, wherein:

deposition angle (θ_1) between the oblique evaporation direction of the inorganic material in the first oblique evaporation step and the substrate is in the range of 5 to 10 degrees;

deposition angle (θ_2) between the oblique evaporation direction of the inorganic material in the second oblique evaporation step and the substrate is in the range of 25 to 30 degrees.

4. A manufacturing method for a substrate for a liquid crystal device, according to claim 1, wherein the oblique evaporation direction (S_A , S_B) is selected according to a construction and disposition of the gap section (80) formed on the surface of the underlayer in the oblique evaporation of inorganic material in at least one of the first oblique evaporation step and the second oblique evaporation step.

5. A manufacturing method for a the substrate for a liquid crystal device, according to claim 1, wherein:

the thickness of the inorganic oblique evaporation layer formed in the first oblique evaporation step is in the range of 5 nm to 16 nm; and

the thickness of the inorganic oblique evaporation layer formed in the second oblique evaporation step is in the range of 10 nm to 40 nm.

6. A manufacturing method for a substrate for a liquid crystal device, according to claim 1, wherein the inorganic material is silicon oxide.